ABSTRACT

A continuous process for the epoxidation of olefins with hydrogen peroxide in the presence of a heterogeneous catalyst promoting the epoxidation reaction, whereby the aqueous reaction mixture contains i) an olefin; ii) hydrogen peroxide; iii) less than 100 wppm of alkali metals, earth alkali metals, both irrespective whether in ionic, complex or covalently bonded form, bases or cations of bases having a pk_B of less than 4.5, or combinations thereof; and, iv) at least 100 wppm of bases or cations of bases having a pk_B of at least 4.5 or combinations thereof, whereby the wppm are based on the total weight of hydrogen peroxide in the reaction mixture.

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